

### COMMONWEALTH of VIRGINIA

### DEPARTMENT OF ENVIRONMENTAL QUALITY

Permit No. VA0029521

Effective Date:

May 19, 2003

Modification Date:

October 2, 2006

**Expiration Date:** 

May 18, 2008

### AUTHORIZATION TO DISCHARGE UNDER THE VIRGINIA POLLUTANT DISCHARGE ELIMINATION SYSTEM AND

THE VIRGINIA STATE WATER CONTROL LAW

In compliance with the provisions of the Clean Water Act as amended and pursuant to the State Water Control Law and regulations adopted pursuant thereto, the following owner is authorized to discharge in accordance with the information submitted with the permit application and with this permit cover page, Part I – Effluent Limitations and Monitoring Requirements, and Part II – Conditions Applicable To All VPDES Permits as set forth herein.

Owner:

Hanover County Department of Public Utilities

Facility Name:

Doswell Wastewater Treatment Plant

City:

r: N

N/A

County:

Hanover

Facility Location:

15468 Theme Park Way, Doswell

The owner is authorized to discharge to the following receiving stream:

Stream:

North Anna River

River Basin:

York River

River Subbasin: Section:

N/A

Oleran

3

Class:

111

Special Standards:

None

Piedmont Deputy Regional Director, Department of Environmental Quality

10/02/06

Date

## LIMITATIONS AND MONITORING REQUIREMENTS - Outfall 001

During the period beginning with the permit's effective date and lasting until the wastewater treatment facility at the Bear Island Paper Company (hereinafter referred to as Bear Island) is expanded to a design average flow of 5.75 MGD or until the permit's expiration date, the permittee is authorized to discharge from outfall serial number 001 – combined waste streams from the Doswell and Bear Island wastewater treatment facilities. (The effluent from the Doswell Wastewater Treatment Facility)

Such discharges shall be limited and monitored at Outfall 001 by the permittee as specified below: æ.

			DISCHARGE	DISCHARGE LIMITATIONS			MONITORING REQUIREMENTS	QUIREMENTS
CHARACTERISTICS	MONTHLY /	LY AVERAGE	WEEKLY /	WEEKLY AVERAGE	AGINIIN AI INA	DAILY	EPEOLIENCY	SAMPI E TYPE
	mg/L	kg/d	mg/L	kg/d		MAXIMUM	וראסרונים הואסרונים	
Flow (cfs) of North Anna River at Route 30 gage or at outfall gage, whichever applies	N A V		ŇĀ	<b>A</b>	ΝΑ	NA	See Special Condition No. 4	ondition No. 4
Flow (MGD)	Z		Z	ź	NA	N	Continuous	Recorded
pH (Standard Units)	AN.	-	¥N .	¥	0.9	9.0	1 / Day	Grab
BOD5	N	Z	See A.1.c.	See A.1.c.	NA	N	1 / Day	24 HC
Total Suspended Solids	¥	¥	See A.1.d.	See A.1.d.	NA	N	3 Days / Week	24 HC
Dissolved Oxygen (mg/L)	AN	-	Z	NA	6.5	JN	1 / Day	Grab
Total Phosphorus	뉟	¥	Z	J <sub>N</sub>	NA	·NA	1 / Month	24 HC
Total Nitrogen*	뉟	Ą	Ž	J	N A	AN	1 / Month	24 HC
Ammonia-N	Z	z	Z	Z	NA	NA	1 / Month	24 HC
Total Kjeldahl Nitrogen	뉟	Ę	13.0	Z	NA A	NA	3 Days / Week	24 HC
Temperature (°F)	Z		NA	NA	NA	NF	1 / Day	Immersion Stabilization

"NA" means not applicable. "NL" means no limitation is established. Monitoring and reporting, however, are required.

"24 HC" means 24-hour composite. \* Total Nitrogen is defined as the sum of Total Kjeldahl Nitrogen, nitrate nitrogen, and nitrite nitrogen.

- There shall be no discharge of floating solids or visible foam in other than trace amounts. ρ.
- The average of daily BOD<sub>5</sub> values over a calendar week shall not exceed the more stringent of the following two equations:

Ö

(1) 7 
$$\Sigma = \frac{3.4 (Q_S - Q_{BIPCO} - 2.6 + Q_{PLAN})}{C}$$

= effluent BOD<sub>5</sub> concentration (mg/L) based on the assimilation capacity of the North Anna River = mean daily stream flow (cfs) at the Route 30 gaging station (see Special Condition I.C.4) = daily rate (cfs) of withdrawal by Bear Island QBIPCO Where

= the magnitude (in cfs) of the reduction in the Lake Anna dam release rate during implementation of the Lake Level **O**PLAN

Contingency Plan  $Q_E = daily effluent flow (cfs) [cfs = MGD x 1.547]$ 

This equation shall apply until a river flow gage is constructed in the vicinity immediately upstream of Outfall 001 in accordance with the implementation schedule in Part I.D.1. Upon construction of the gage, the equation in Part I.A.1.f. shall replace the above equation.

(2) 
$$\frac{7}{\sum_{\text{Lw} = \text{i=1}} \frac{30 Q_{\text{H}} + 50 Q_{\text{B}}}{Q_{\text{H}} + Q_{\text{B}}}}$$

Where  $L_W=$  effluent BOD<sub>5</sub> concentration (mg/L) based on minimum treatment requirements.  $Q_H=$  daily flow from the Doswell Wastewater Treatment Plant (Outfall 101)  $Q_B=$  daily flow from the Bear Island Wastewater Treatment Facility (Outfall 201)

- The more stringent of (1) or (2) above establishes the effluent BODs limitation except when stream flow at the Route 30 gage is less than 35.66 cfs. At 35.66 cfs and less, the effluent BOD<sub>5</sub> limitation is the more stringent of (1) with Qs set equal to 35.66 cfs or (2) above. The permittee shall continue to calculate  $\underline{C}$  based on the actual stream flow at Route 30 and report those flows and values of  $\underline{C}$  on the Discharge Monitoring Report (DMR). Following construction of the outfall gage: 1 Equation (1) will be replaced by the equation in Part I.A.1.f. 2. The more 26.86 cfs and less, the effluent BOD<sub>5</sub> limitation is the more stringent of I.A.1.f. with QGAGE set equal to 26.86 cfs or (2) above. The permittee stringent of I.A.1.f. or (2) above will establish the effluent BODs limitation except when stream flow at the outfall gage is less than 26.86 cfs. At shall continue to calculate C based on the actual stream flow at the outfall gage and report those flows and values of C on the DMR. <u>(e)</u>
- Notwithstanding the above, the effluent BODs quantity discharged shall not exceed 5,275 pounds per day (2,394 kg/d) at any time. 4

The average of daily TSS values over a calendar week shall not exceed the value established by the following equation:

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$$\Sigma = 30 Q_{H} + 50 Q_{B}$$
 $L_{W} = i = 1$ 
 $Q_{H} + Q_{B}$ 
 $3*$ 

TSS = effluent TSS concentration (mg/L) based on minimum treatment requirements.  $Q_H$  = daily flow from the Doswell Wastewater Treatment Plant (Outfall 101)  $Q_B$  = daily flow from the Bear Island Paper Company Wastewater Treatment Facility (Outfall 201) Where

\* Or 7 if daily monitoring is required per Special Condition No. 25.

- Notwithstanding the above, the effluent total suspended solids quantity discharged shall not exceed 5,275 pounds per day (2,394 kg/d) at any (S)
- A calendar week average shall be calculated by determining each day's BODs and Total Suspended Solids (concentrations and quantities) and averaging the individual values for each parameter (i.e., it is not correct to take an average stream flow and an average effluent flow over the 7-day period to determine average concentration or quantity). If any month ends in an incomplete calendar week, the report for that week shall be included in the following monthly reporting period.

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Upon construction of a river gaging station in the vicinity immediately upstream of Outfall 001, the following control equation shall replace the control equation in Part I.A.1.c.(1) above:

$$\sum_{C = i = 1}^{I} \frac{3.4 \left( Q_{GAGE} + Q_{PLAN} \right)}{Q_{E}}$$

Where

 effluent BOD<sub>5</sub> concentration (mg/L) based on the assimilation capacity of the North Anna River
 mean daily stream flow (cfs) at the outfall gaging station (see Special Condition I.C.4)
 the magnitude (in cfs) of the reduction in the Lake Anna dam release rate during implementation of the Lake Level QGAGE Q<sub>PLAN</sub>

Contingency Plan

= daily effluent flow (cfs) [cfs = MGD x 1.547]

### A.

# LIMITATIONS AND MONITORING REQUIREMENTS - Outfall 101

During the period beginning with the permit's effective date and lasting until the permit's expiration date, the permittee is authorized to discharge from outfall serial number 101 – effluent from the Doswell Wastewater Treatment Plant c i

Island is not discharging. When Bear Island is not discharging, a direct discharge from Doswell shall be in accordance with the requirements in Parts I.A.2. and I.A.4. of this permit. Where the same parameter is addressed in both Parts I.A.2. and I.A.4., the more stringent of the limitations shall be the applicable limitation. After the expansion of the Bear Island wastewater treatment facility to a design average flow of 5.75 MGD, these limitations shall be applicable at all times that the Doswell effluent is not being treated and reused by Bear Island. The Doswell effluent shall always be discharged with the Bear Island effluent except when Bear

Such discharges shall be limited and monitored at Outfall 101 by the permittee as specified below:

				***************************************		The state of the s		
ת דורים			DISCHARGE	DISCHARGE LIMITATIONS	S		MONITORING REQUIREMENTS	UIREMENTS
CHARACTERISTICS	MONTHLY AVERAGE	VERAGE	WEEKLY,	WEEKLY AVERAGE	RAIL BAIL BA	DAILY	EDEOLIENCY	BOXT BIGINAS
	mg/L	kg/d	mg/L	kg/d		MAXIMUM		SAMPLE ITE
Flow (MGD)*	Z		_	Ž	NA	٦	Continuous	Recorded
BOD <sub>5</sub>	30	N	45	¥	NA NA	ĀN	5 Days / Week	24 HC
Total Suspended Solids	30	Z	45	Z	NA	NA	3 Days / Week	24 HC
Fecal Coliform (n / 100 ml)	200**	*	Z	NA	NA	Z	3 Days / Week***	Grab
Total Phosphorus	Ŋ	Z	¥	¥	NA	NA	1 / Month	24 HC
Ammonia-N	볼	N	Ä	¥	NA	NA	1 / Month	24 HC
Total Kjeldahl Nitrogen	Ž	Z	Z	Z	NA	NA	1 / Month	24 HC

The design flow of this treatment facility is 1.0 MGD.

\*\* Geometric mean

\*\*\* Samples shall be collected between 10:00 AM and 4:00 PM.

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At least 85% removal for BOD<sub>5</sub> and TSS must be attained for the effluent at Outfall 101.

# LIMITATIONS AND MONITORING REQUIREMENTS - Outfall 201

During the period beginning with the permit's effective date and lasting until the wastewater treatment facility at Bear Island is expanded to a design average flow of 5.75 MGD or until the permit's expiration date, the permittee is authorized to discharge from outfall serial number 201 – effluent from the Bear Island Wastewater Treatment Facility. <u>რ</u>

Such discharges shall be limited and monitored at Outfall 201 by the permittee as specified below:

7									
	UIREMENTS	SAMD! E TYPE	7 I I T II II I	Recorded	24 HC	24 HC	24 HC	24 HC	24 HC
	MONITORING REQUIREMENTS	EBEOLIENCY		Continuous	5 Days / Week	3 Days / Week	1 / Month	1 / Month	2 / Month
		DAILY	MAXIMUM	J	NA	AN	NA	AN	NA
	S	A AI NIN AI IN A		NA	NA	NA	NA	NA	NA
	DISCHARGE LIMITATIONS	WEEKLY AVERAGE	kg/d	J	N	Z	Z	z	Ę
	DISCHARGE	WEEKLY	mg/L	2	¥	¥	₹	Z	٦
		AVERAGE	kg/d		N	JN.	¥	¥	¥
		MONTHLY AVERAGE	7/6w	J	٦	٦N	¥	¥	J.
	E VIII III III III III III III III III I	CHARACTERISTICS		Flow (MGD)	BOD <sub>5</sub>	Total Suspended Solids	Total Phosphorus	Ammonia-N	Total Kjeldahl Nitrogen

# LIMITATIONS AND MONITORING REQUIREMENTS -- Outfall 001\*

- serial number 001\* combined waste streams from the Doswell and Bear Island wastewater treatment facilities. (The Doswell shall always be discharged with the Bear Island effluent except when Bear Island is not discharging. When Bear Island is not discharging, a direct discharge from Doswell (Outfall 101) shall be in accordance with the requirements in Parts I.A.2. and I.A.4. of this permit. Where the same parameter is addressed in both Parts I.A.2. and I.A.4., the more stringent of the limitations shall be the applicable limitation.) Upon certification by the staff of the Department of Environmental Quality that the expansion of the wastewater treatment facility at Bear Island to a design average flow of 5.75 MGD is ready to be placed into service and lasting until the permit's expiration date, the permittee is authorized to discharge from outfall
- Such discharges shall be limited and monitored at Outfall 001 by the permittee as specified below: ത്

EFFLUENT CHARACTERISTICS         MONTHLY AVERAGE         WEE           CHARACTERISTICS         mg/L         kg/d         m           Flow (cfs) of North Anna River at a gage in the vicinity immediately upstream of Outfall 001         NA         NA           Flow (MGD)         NL         NL         S           PH (Standard Units)         NL         S           CBOD <sub>5</sub> NL         NL         S           Total Suspended Solids         NL         th         th           Dissolved Oxygen (mg/L):         NA         NA         th           Cascade Aeration         NA         NA         NA	DISCHARGE LIMITA WEEKLY AVERAGE mg/L kg/d NA NA NA NA NA NA	DISCHARGE LIMITATIONS WEEKLY AVERAGE			MONITORING R	MONITORING REQUIREMENTS
MONTHLY AVERAGE  mg/L  NA  NL  NA  NL  NA  NA  NL  NA  NA  N	MEEKLY AV mg/L N N N N N N N	/ERAGE				
NA NA NA NA NA NA NL NL NA NL NL NL NL NL NL NL			MINIMI	DAILY	FRECHENCY	SAMPI F TYPF
NA NL NL NL NL NL NL NL NL		kg/d		MAXIMUM		
NL NA NA NIds NL		NA A	NA	NA	Continuous	Recorded
NA NL		JZ.	NA	N	Continuous	Recorded
NL         NL           spended Solids         NL         NL           d Oxygen (mg/L):         Cascade Aeration         NA	30	NA	0.9	9.0	1 / Day	Grab
); On NA NA	3	See A.4.c.	NA	NA	1 / Day	24 HC
	20	See A.4.d.	NA	NA	1 / Day	24 HC
	Z	NA	6.5	J	1 / Day	Grab
Pure Oxygen Aeration	See P	See Part I.A.4.f			Continuous	Measured
NF NF	¥	٦	NA	NA	1 / Month	24 HC
Total Nitrogen** NL NL	뉟	Z	NA	AN	1 / Month	24 HC
Ammonia-N NL NL	¥	٦	Ä	JN.	1 / Month	24 HC
Total Kjeldahl Nitrogen NL NL 1	10.0	¥	NA	ΑN	1 / Day	24 HC
Temperature NA NA NA	NA	NA	NA	<del>Ј</del> 。06	1 / Day	Immersion Stabilization

Outfall 001 is either the discharge via the cascade aeration structure or discharge through the submerged diffuser. Discharge from both points shall not simultaneously occur.

4.

<sup>\*\*</sup> Total Nitrogen is defined as the sum of Total Kjeldahl Nitrogen, nitrate nitrogen, and nitrite nitrogen.

- b. There shall be no discharge of floating solids or visible foam in other than trace amounts.
- c. The average of daily CBOD<sub>5</sub> loadings over a calendar week shall not exceed <u>L</u>, as defined by the following equation:

(1) 
$$\frac{7}{\sum}$$
 18.97 Q<sub>s</sub> + 204.77 L =  $\frac{1}{1}$  1

daily stream flow in cfs at a gaging station located in the vicinity immediately upstream of Outfall 001.  $Q_s$  shall be the mean daily flow recorded at the gage for that day. effluent CBOD<sub>5</sub> in pounds per day 11 11 ٦ď Where

- less, the effluent CBOD<sub>5</sub> limitation is the loading established by (1) above with Q<sub>s</sub> set equal to 22.22 cfs. The permittee shall continue to calculate <u>L</u> based on the actual stream flow at the gage and report those flows and values of <u>L</u> on the Discharge Monitoring Report (DMR). The equation in (1) above establishes the effluent CBODs loading limitation except when stream flow at the gage is less than 22.22 cfs. At 22.22 cfs and (5)
- (3) Notwithstanding the above, the effluent CBOD<sub>5</sub> quantity shall not exceed 5,275 pounds per day (2,394 kg/d) at any time.
- The effluent total suspended solids quantity shall not exceed 5,275 pounds per day (2,394 kg/d) at any time.
- A calendar week average shall be calculated by determining each day's CBODs and Total Suspended Solids and averaging the seven individual values for each parameter (i.e., it is not correct to take an average stream flow and an average effluent flow over the 7-day period to determine average quantity). If any month ends in an incomplete calendar week, the report for that week shall be included in the following monthly reporting period. ø.
- The following conditions define the dissolved oxygen (D.O.) requirements for Outfall 001 in regard to use of the pure oxygen aeration system: <u>...</u>

Season	Effluent D.O. (mg/L)	Minimum River Flow (cfs)	Minimum River Flow (cfs) at Gage to Switch to Cascade Aeration
		Outfall 001 ≤ 6.34 MGD	Outfall 001 > 6.34 MGD
April through September	58		235
October through March	16	100	235

### FACILITY NAME/LOCATION IF DIFFERENT) PERMITTEE NAME/ADDRESS(INCLUDE

Hanover County Doswell WWTP ADDRESS PO Box 470 NAME

Hanover

LOCATION

**FACILITY** 

VA 23069

## NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM(NPDES) COMMONWEALTH OF VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY

DISCHARGE MONITORING REPORT(DMR)

DISCHARGE NUMBER DA≺ YEAR MO MONITORING PERIOD 001 2 DAY PERMIT NUMBER VA0029521 8 YEAR

FROM

02/03/2003

Municipal Major

DEPT. OF ENVIRONMENTAL QUALITY (REGIONAL OFFICE)

Piedmont Regional Office 4949-A Cox Road VA 23060 Glen Allen NOTE: READ PERMIT AND GENERAL INSTRUCTIONS BEFORE COMPLETING THIS FORM.

PARAMETER		QUANTIT	QUANTITY OR LOADING		)	QUALITY OR CONCENTRATION	ICENTRATION			FREQUENCY	SAMPLE
		AVERAGE	MAXIMUM	UNITS	MINIMOM	AVERAGE	MAXIMUM	UNITS	EX.	ANALYSIS	IYPE
	REPORTD				***	a					
(AS P)	REGRMN1	NL	NL	KG/D	**	NIT	NL	mG/L		1/М	24HC
013 NITROGEN, TOTAL AS N	REPORTD				***						
	REORMNI	NL	NL	KG/D	***	NL	NL	MG/L		1/М	24HC
039 AMMONIA, AS N	REPORTD				****						
	REGRMN1	NL	NL	KG/D	***	NF	NL	MG/L		1/м	24HC
068 TKW (N-KJEL)	REPORTD				****						
	REGRMNI	NL	NL	KG/D	***	NI	13.0	MG/L		зр/м	24HC
078 TEMPERATURE, WATER	REPORTD	***	***		***						
(DEG. F)	REGRMN1	****	***		***	NL	NL	Ē		1/DAY	IS
711 ACUTE 48 HR STATIC	REPORTD	***	***		***	***************************************					
CERIODAPHNIA DUBIA - LCS	REGRMN1	***	***		***	***	NL	TU-A		1/YR	24HC
712 ACUTE 48 HR STATIC	REPORTD	***	***************************************		***	***					
PIMEPHALES PROMELAS - LC5	REGRMN1	***	**************************************		***	***	NL	TU-A		1/YR	24HC
720 CHRONIC 3-BROOD	REPORTD	***	***		***	***					
STATIC RENEWAL CERIODAPHN	REGRMN1	****	***		***	***	NL	TU-C		1/YR	24HC
STATISTICAL DEPARTS DECLIRED AND THE OF STATISTICS OF STAT	NAMEDIAL			***************************************	-				·		<u> </u>

DATE		ON CONTRACTOR OF STATE OF STAT		li t			VEAR MO DAY
Andre Anne and Anne a		DTA CIBITORY	CENTICAL	TELEPHONE			
OPERATOR IN RESPONSIBLE CHARGE		BOSTANOIS	120 A 100 A	RINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT			HAILTANGIS
OPERATOR IN		TVDCD OB OBINITED NIABIC		PRINCIPAL EXECUTIVE OFFIC			TYPED OR PRINTED NAME
TOTAL BOD5(K.G.)		ATTACHMENTS WERE	R AND EVALUATE THE	RING THE	ARE SIGNIFICANT POSSIBILITY OF FINE	001 AND 33 U.S.C. 6	70 /200 000 /01 / 01
TOTAL FLOW(M.G.)		I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREFAKED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM	DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHER AND EVALUATE THE INFORMATION SUBMITTED. BASED ON MY INDUITRY OF THE PERSON OR PERSONS WHO MANAGE	THE SYSTEM OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS TO THE BEST OF MY KNOWLEDGE AND	BELLIEF TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE	AND IMPRISONMENT FOR KNOWING VIOLATIONS. SEE 18 U.S.C. & 1001 AND 33 U.S.C. & 1119. (Penalties under These Statutes may include fines up to 610 000 and/or	onths and 5 years.)
TOTAL OCCURRENCES		PENALTY OF LAW THAT MY DIRECTION OR SUPER	URE THAT QUALIFIED PI MITTED, BASED ON MY 1	HOSE PERSONS DIRECTLY E INFORMATION SUBMITT	CURATE AND COMPLETE. UBMITTING FALSE INFO	T FOR KNOWING VIOLAT	maximum imprisonment of between 6 months and 5 years.)
BYPASSES AND	OVERFLOWS	I CERTIFY UNDER PREFAKED UNDER	DESIGNED TO ASS INFORMATION SUB	THE SYSTEM OR T	BELIEF TRUE, AC PENALTIES FOR S	AND IMPRISONMEN	maximum imprisc

FACILITY NAME/LOCATION IF DIFFERENT) PERMITTEE NAME/ADDRESS(INCLUDE

VA 23069 Hanover County Doswell WWTP ADDRESS PO Box 470 NAME

Hanover LOCATION FACILITY

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM(NPDES) COMMONWEALTH OF VIRGINIA
DEPARTMENT OF ENVIRONMENTAL QUALITY DISCHARGE MONITORING REPORT(DMR)

DISCHARGE NUMBER DΑΥ YEAR MO MONITORING PERIOD 001 2 DAY PERMIT NUMBER VA0029521 § YEAR FROM

02/03/2003

Municipal Major

DEPT. OF ENVIRONMENTAL QUALITY (REGIONAL OFFICE)

Piedmont Regional Office 4949-A Cox Road

Glen Allen

VA 23060

NOTE: READ PERMIT AND GENERAL INSTRUCTIONS BEFORE COMPLETING THIS FORM.

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		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS	ĽÝ:	ANALYSIS	
721 CHRONIC 7-DAY STATIC	REPORTD	*	***************************************		***	****					
RENEWAL PIMEPHALES PROMEL	REGRMIN	****	****		***	***	NL	TU-C		1/YR	24HC
	REPORTD										
	REQRMN						-			***	
	REPORTD				. 18. 11. 11. 12						
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ADDITIONAL PERMIT REQUIREMENTS OR COMMENTS	COMMENTS										

		DAY			DAY
ш		MO. DAY			MO. DAY
DATE		YEAR			YEAR
		CERTIFICATE NO.	TELEPHONE		
OPERATOR IN RESPONSIBLE CHARGE		SIGNATURE	NCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	AND THE PROPERTY OF THE PROPER	SIGNATURE
OPERATOR IN R		TYPED OR PRINTED NAME	PRINCIPAL EXECUTIVE OFFICE		TYPED OR PRINTED NAME
TOTAL BOD5(K.G.)		<u> </u>	OR PERSONS WHO MANAGE SRING THE IY KNOWLEDGE AND	ARE SIGNIFICANT FOSSIBILITY OF FINE 1001 AND 33 U.S.C. &	o to \$10,000 and/or
TOTAL FLOW(M.G.) TOTAL BOD5(K.G.)		CEKITIYY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE THERRED WINDER MY DIRECTION OR SUBERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY CATHER AND EVALUATE THE	INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MY ILE SYSTEM OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR CATHERING THE NEGROMS THE INFORMATION SHEMITTEN IS TO THE BEST OF MY KNOWLEDER AND	TRIANSARYON: MINISTRACIO, ACCURATE AND COMPLETE. I AM AMARE THAT THERE ARE SIGNIFICANT FREE PRESENTED FOR SUBMILITING PALSE INFORMATION, INCLUDING THE ESSENTIALITY OF FINE PART INFORPERSONMENT FOR KNOWING VIOLATIONS. SEE 18 U.S.C. & 1001 AND 33 U.S.C. & NO.	1319. (Penalties under these statutes may include fines up to \$10,000 and/or naximum imprisonment of between 6 months and 5 years.)
TOTAL	COCCUPACION	PENALTY OF LAW THAT MY DIRECTION OR SUPE. URE THAT QUALIFIED P	MITTED, BASED ON MY HOSE PERSONS DIRECTLE R INFORMATION SHRMITT	CURATE AND COMPLETE. UBMITTING FALSE INFO	1119. (Penalties under these statutes may include fine maximum imprisonment of Detween 6 months and 5 years.)
BYPASSES	AND	I CEKTIFY UNDER FREPARED UNDER DESIGNED TO ASS	INFORMATION SUB	BELIEF TRUE, AC PENALTIES FOR S	1319. (Penaltie maximum imprisc

### FACILITY NAME/LOCATION IF DIFFERENT) PERMITTEE NAME/ADDRESS(INCLUDE

NAME Hanover County Doswell WWTP ADDRESS PO Box 470

Hanover LOCATION FACILITY

VA 23069

### NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM(NPDES) COMMONWEALTH OF VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY DISCHARGE MONITORING REPORT(DMR)

101 VA0029521

DISCHARGE NUMBER YEAR MO DAY MONITORING PERIOD 0 DAY PERMIT NUMBER § YEAR

FROM

DEPT. OF ENVIRONMENTAL QUALITY (REGIONAL OFFICE)

12/13/2002

Municipal Major

Piedmont Regional Office

4949-A Cox Road

Glen Allen

VA 23050

NOTE: READ PERMIT AND GENERAL INSTRUCTIONS BEFORE COMPLETING THIS FORM.

		TITNALIO	OHANTITY OR LOADING		<u> </u>	QUALITY OR CONCENTRATION	CENTRATION		Ö.		SAMPLE
TAKAME EK		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS	EX.	ANALYSIS	TYPE
003 BOD5	REPORTD	CONTRACTOR			****						
	REGRMN1	NL	NL	KG/D	****	30.0	45.0	MG/L		5D/W	24HC
004 TSS	REPORTD		Andrew List and Andrews Andrews List and		***						
	REQRMN	NL	NL	KG/D	* * * * * * * * * * * * * * * * * * * *	30.0	45.0	MG/L		3D/W	24HC
006 COLIFORM, FECAL	REPORTD	****	***		****						
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PERMITTEE NAME/ADDRESS(INCLUDE FACILITY NAME/LOCATION IF DIFFERENT)

Hanover County Doswell WWTP ADDRESS PO Box 470 NAME

Hanover

LOCATION **FACILITY** 

VA 23069

## NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM(NPDES) COMMONWEALTH OF VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY

DISCHARGE MONITORING REPORT(DMR)

DISCHARGE NUMBER YEAR MO DAY MONITORING PERIOD 201 D D DAY PERMIT NUMBER VA0029521 § YEAR

FROM

VA 23060

Piedmont Regional Office 4949-A Cox Road

DEPT. OF ENVIRONMENTAL QUALITY (REGIONAL OFFICE)

12/13/2002

Municipal Major

Glen Allen

NOTE: READ PERMIT AND GENERAL INSTRUCTIONS BEFORE COMPLETING THIS FORM.

PARAMETER		QUANTI	QUANTITY OR LOADING			QUALITY OR CONCENTRATION	CENTRATION		CN	FREQUENCY	SAMPIF
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maximum imprisc	Maximum imprisonment of between 6 months and 5 years.)	onths and 5 years.)		TYPED OR PRINTED NAME	SIGNATURE	-	YEAR	MO. DAY	DAY

THIS REPORT IS REQUIRED BY LAW (33 U. S. C. § 1318 40 CFR 122.60). FAILURE TO REPORT OR FAILURE TO REPORT TRUTHFULLY CAN RESULT IN CIVIL PENALTIES NOT TO EXCEED \$25,000 PER DAY OF VIOLATION OR BY IMPRISONMENT FOR NOT MORE THAN FIVE YEARS, OR BOTH.

## GENERAL INSTRUCTIONS

- 1. Complete this form in permanent ink or indelible pencil.
- Be sure to enter the dates for the first and last day of the period covered by the report on the form in the space marked "Monitoring Period". તં
- For those parameters where the "permit requirement" spaces are blank or a limitation appears, provide data in the "reported" spaces in accordance with your permit. 3
- Enter the average and, if appropriate, maximum quantities and units in the "reported" spaces in the columns marked "Quantity or Loading". KG/DAY = Concentration(mg/I) x Flow(MGD) x 3.785. 4
- Enter maximum, minimum, and/or average concentrations and units in the "reported" spaces in the columns marked "Quality or Concentration". S.
- Enter the number of samples which do not comply with the maximum and lor minimum permit requirements in the "reported" space in the column ဖ
- Enter the actual frequency of analysis for each parameter (number of times per day, week, month) in the "reported" space in the column marked "Frequency of Analysis".
- Enter the actual type of sample collected for each parameter in the "reported" space in the column marked "Sample Type". ထ
- Enter additional required data or comments in the space marked "additional permit requirements or comments" တ်
- Record the number of bypasses during the month, the total flow in million gallons and BOD5 in kilograms in the proper columns in the section marked "Bypasses and Overflows". 5.
- The operator in responsible charge of the facility should review the form and sign in the space provided. If the plant is required to have a licensed operator, the operator's certificate number should be reported in the space provided. <del>.</del>
- The principal executive officer should then review the form and sign in the space provided and provide a telephone number where he/she can be 12
- 13. You are required to sample at the frequency and type indicated in your permit.
- Send the completed form to your Dept. of Environmental Quality Regional Office by the 10th of each month. 14.
- 15. You are required to retain a copy of the report for your records.
- Where violations of permit requirements are reported, attach a brief explanation in accordance with the permit requirements describing causes and corrective actions taken. Reference each violation by date. 16.
- If you have any questions, contact the Dept. of Environmental Quality Regional Office. 17.

### ATTACHMENT A

Doswell Waste Water Treatment Plant

PERMIT NO: VA0029521

Operator in responsible charge	LICENSE NUMBER :
70	L.OLI (OL ((OL) ()

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### ATTACHMENT A

Doswell Waste Water Treatment Plant

PERMIT NO: VA0029521

LICENSE NUMBER :\_\_\_\_\_ Operator in responsible charge\_\_\_\_\_

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### ATTACHMENT "B" (RIVER MONITORING)

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### B. Monitoring for Water Quality Standards

Once during the permit term, the permittee shall monitor the effluent at Outfall 001 for the following chemicals according to the indicated analysis number, quantification level, and sample type. The sample shall be collected within the last year of the permit term and the data submitted with the permit renewal application. Monitoring and analysis shall be conducted in accordance with 40 CFR Part 136 or alternative EPA approved methods. It is the responsibility of the permittee to ensure that proper QA/QC protocols are followed during the sample gathering and analytical procedures. The Department will use this data for making specific permit decisions in the future. This permit may be modified or revoked and reissued to incorporate limitations for any of the following chemicals.

CHEMICAL	EPA ANALYSIS NUMBER	QUANTIFICATION LEVEL <sup>(1)</sup>	SAMPLE TYPE <sup>(2)</sup>
METALS (Dissolved)			
Antimony	(3)	18000	G or C
Arsenic III	(3)	210	G or C
Cadmium	(3)	3.1	G or C
Chromium III	(3)	570	G or C
Chromium VI	(3)	9.2	G or C
Copper	(3)	30	G or C
Lead	(3)	44	G or C
Mercury	(3)	1.0	G or C
Nickel	(3)	57	G or C
Selenium	(3)	10.0	G or C
Silver	(3)	11.0	G or C
Zinc	(3)	180	G or C
Pesticides/PCBs			
Aldrin :	608	0.05	G or C
Chlordane	608	0.2	G or C
Chlorpyrifos	622	(4)	G or C
DDD	608	0.1	GorC
DDE	608	0.1	G or C
DDT	608	0.1	GorC
Demeton	(5)	(4)	G or C
Dieldren	608	0.1	G or C
Endosulfan	608	0.1	G or C
Endrin	608	0.1	G or C
Guthion	622	(4)	G or C
Heptachlor	608	0.05	G or C
Hexachlorocyclohexane (Lindane)	608	0.05	G or C
Kepone	(6)	(4)	C or C
Malathion	(5)	(4)	G or C
Methoxyclor	(5)	(4)	G or C
Mirex	(5)	(4)	G or C
Parathion	(5)	(4)	G or C
PCB-1242	608	1.0	G or C
PCB-1254	608	1.0	G or C
PCB-1221	608	1.0	G or C
PCB-1232	608	1.0	G or C
PCB-1248	608	1.0	G or C
PCB-1260	608	1.0	G or C
PCB-1016	608	1.0	G or C
Toxaphene	608	5.0	GorC
BASE NEUTRALS			
Acenaphthene	625	10.0	GorC
Anthracene	625	10.0	G or C
Benzo(a)anthracene	625	10.0	G or C
Benzo(b)fluoranthene	625	10.0	G or C
Benzo(k)fluoranthene	625	10.0	G or C

CHEMICAL	EPA ANALYSIS NUMBER	QUANTIFICATION LEVEL <sup>(1)</sup>	SAMPLE TYPE <sup>(2)</sup>
Benzo(a)pyrene	625	10.0	GorC
Butylbenzyl Phthalate	625	10.0	GorC
Chrysene	625	10.0	GorC
Dibenzo(a,h)anthracene	625	20.0	GorC
Dibutyl Phthalate	625	10.0	G or C
1,2-Dichlorobenzene	625	10.0	GorC
1,3-Dichlorobenzene	625	10.0	G or C
1,4-Dichlorobenzene	625	10.0	GorC
Diethyl Phthalate	625	10.0	GorC
Di-2-Ethylhexyl Phthalate	625	10.0	GorC
2,4-Dinitrotoluene	625	10.0	G or C
Fluoranthene	625	10.0	G or C
Fluorene	625	10.0	G or C
Indeno(1,2,3-cd)pyrene	625	20.0	GorC
Isophorone	625	10.0	G or C
Naphthalene	625	10.0	GorC
Nitrobenzene	625	10.0	GorC
Pyrene	625	10.0	GorC
1,2,4-Trichlorobenzene	625	10.0	GorC
VOLATILES			
Benzene	624	10.0	TG
Bromoform	624	10.0	T G
Carbon Tetrachloride	624	10.0	G
Chlorodibromomethane	624	10.0	G
Chloroform	624	10.0	G
Dichloromethane	624	20.0	G
Dichlorobromomethane	624	20.0	G
1,2-Dichloroethane	624	10.0	G
1,1-Dichloroethylene	624	10.0	G
Ethylbenzene	624	10.0	G
Monochlorobenzene	624	50.0	G
Tetrachloroethylene	624	10.0	G
Toluene	624	10.0	G
Trichloroethylene	624	10.0	G
Vinyl Chloride	624	10.0	G
ACIDS			
2-Chlorophenol	625	10.0	GorC
2,4-Dichlorophenol	625	10.0	GorC
2,4-Dimethylphenol	625	10.0	GorC
Pentachlorophenol	625	50.0	G or C
Phenol (7)	625	10.0	GorC
2,4,6-Trichlorophenol	625	10.0	L
MISCELLANEOUS	1 023	1 10.0	GorC
Chloride	(5)	(4)	
Total Residual Chlorine	(5)	(4)	С
Total Cyanide	335.2	100	G
Dioxin	1613	10.0	G
Hardness (as mg/L CaCO <sub>3</sub> )		0.00001	C
Hydrogen Sulfide	(5)	(4)	С
Tributyltin <sup>(8)</sup>	(5)	(4)	G
rmatymii	NBSR 85-3295	(4)	С
Xylenes (total)	SW 846, Method 8021B or 8260B	6.0	G

(1) Quantification Level (QL) is defined as the lowest concentration used for the calibration of a measurement system when the calibration is in accordance with the procedures published for the required method.

The quantification levels indicated for the metals are actually Specific Target Values developed for this permit. The Specific Target Value is the approximate value that may initiate a wasteload allocation analysis. Target values are not wasteload allocations or effluent limitations. The Specific Target Values are subject to change based on additional information such as hardness data, receiving stream flow, and design flows.

Units for the quantification level are micrograms per liter unless otherwise specified.

Quality control and quality assurance information shall be submitted to document that the required quantification level has been attained.

### (2) Sample Type

"G" means grab sample which is defined as an individual sample collected in less than fifteen (15) minutes. Substances specified with "grab" sample type shall only be collected as grabs. The permittee may analyze multiple grabs and report the average results provided that the individual grab sample results are also reported.

"C" means composite sample which is defined as a 24-hour composite unless otherwise specified. The composite shall be a combination of individual samples, taken proportional to flow, obtained at hourly or smaller time intervals. The individual samples may be of equal volume for flows that do not vary by +/- 10 percent over a 24-hour period. For composite metals samples, the individual sample aliquots shall be filtered and preserved immediately upon collection and prior to compositing; or, if a single composite sample is collected, the sample shall be filtered and preserved within one hour from the end of the compositing period.

(3) A specific analytical method is not specified. An appropriate method shall be selected from the following list of EPA methods (or any approved method presented in 40 CFR Part 136) which will achieve a quantification level less than the required quantification level indicated for each metal. If the test result is less than the required quantification level (QL), a "<[QL]" shall be reported where the actual analytical test QL is substituted for [QL].

Metal	Analytical Methods
Antimony	204.1; 200.7; 200.8; 204.2; 1638; 1639
Arsenic*	200.7; 200.8; 200.9; 1632
Barium	200.7; 200.8; 208.1; 208.2
Cadmium	200.7; 200.8; 200.9; 213.1; 213.2; 1637; 1638; 1639; 1640
Chromium*	200.7; 200.8; 200.9; 218.1; 218.2; 218.3; 1639
Chromium VI	218.4; 1636
Copper	200.7; 200.8; 200.9; 220.1; 220.2; 1638; 1640
lron	200.7; 236.1; 236.2
Lead	200.7; 200.8; 200.9; 239.1; 239.2; 1637; 1638; 1640
Manganese	200.7; 200.8; 200.9; 243.1; 243.2
Mercury	200.7; 200.8; 245.1; 1631
Nickel	200.7; 200.8; 200.9; 249.1; 249.2; 1638; 1639; 1640
Selenium	200.7; 200.8; 200.9; 270.2; 1638; 1639
Silver	200.7; 200.8; 200.9; 272.1; 272.2; 1638
Zinc	200.7; 200.8; 289.1; 289.2; 1638; 1639

Arsenic III and chromium III are measured by the total arsenic and total chromium analyses, respectively. If the result of the total analysis is less than or equal to the quantification level, the result for the trivalent form can be reported as less than QL.

- (4) The QL is at the discretion of the permittee. For any substance addressed in 40 CFR Part 136, the permittee shall use one of the approved methods in 40 CFR Part 136.
- (5) Any approved method presented in 40 CFR Part 136.
- (6) SW846 Method 8270 C, provided the laboratory has an Initial Demonstration of Capability, has passed a Performance Test for Kepone, and meets the acceptance criteria for Kepone given in Method 8270 C.
- (7) Requires continuous extraction.
- (8) DEQ's approved analysis for TBT may also be used. See "A Manual for the Analysis of Butyltins in Environmental Systems" by the Virginia Institute of Marine Science dated November 1996.

- C. Other Requirements or Special Conditions
  - 1. Whole Effluent Toxicity (WET) Monitoring Program
    - a. Biological Monitoring:
      - (1) In accordance with the schedule in b. below, the permittee shall annually conduct acute and chronic toxicity tests for the duration of the permit. The permittee shall collect 24-hour flow-proportioned composite samples of final effluent from outfall 001.

The acute tests to use are:

48 Hour Static Acute test using *Ceriodaphnia dubia*48 Hour Static Acute test using *Pimephales promelas* 

These acute tests shall be performed with a minimum of 5 dilutions, derived geometrically, for calculation of a valid  $LC_{50}$ . Express the results as  $TU_a$  (Acute Toxic Units) by dividing 100 by the  $LC_{50}$  (100 /  $LC_{50}$ ) for DMR reporting.

The chronic tests to use are:

Chronic 3-Brood Static Renewal Survival and Reproduction Test using *Ceriodaphnia dubia* Chronic 7-Day Static Renewal Survival and Growth Test using *Pimephales promelas* 

These chronic tests shall be conducted in such a manner and at sufficient dilutions (minimum of five dilutions, derived geometrically) to determine the "No Observed Effect Concentration" (NOEC) for survival and reproduction or growth. Results which cannot be determined (i.e., a "less than" NOEC value) are not acceptable, and a retest will have to be performed. Express the test NOEC as  $TU_c$  (Chronic Toxic Units) by dividing 100 by the NOEC (100 / NOEC) for DMR reporting. Report the  $LC_{50}$  at 48 hours and the  $IC_{25}$  with the NOEC's in the test report.

The permittee may provide additional samples to address data variability; these data shall be reported and may be included in the evaluation of effluent toxicity. Test procedures and reporting shall be in accordance with the WET testing methods cited in 40 CFR 136.3

- (2) The test dilutions should be able to determine compliance with the following endpoints:
  - (a) Acute tests: LC<sub>50</sub> ≥ 100% effluent, equivalent to a TU<sub>a</sub> ≤ 1.0
  - (b) Chronic NOEC ≥ 21%, equivalent to a TU<sub>c</sub> ≤ 4.76, prior to the mill expansion at Bear Island; and chronic NOEC ≥ 24%, equivalent to a TU<sub>c</sub> ≤ 4.16, after the mill expansion.
- (3) If an acute or chronic test does not meet the endpoint specified in (2) above, a retest should be performed within 30 days.
  - (a) If the retest meets the endpoint(s) of (2) above, resume annual test frequency.
  - (b) Should the retest not meet the endpoint(s) of (2) above, the tests in (1) above shall be performed quarterly for a period of one year. When four quarters of tests have been completed, the data will be evaluated.
- (4) Should evaluation of the data indicate that a limit is needed, a WET limit and compliance schedule will be required and the toxicity tests of (1) above may be discontinued. However, if evaluation of the data indicates that a limit is not needed, the annual testing described in (1) above shall resume.

### b. Reporting Schedule:

The permittee shall report the results on the DMR and supply 2 copies of the toxicity test reports specified in this WET Monitoring Program in accordance with the following schedule:

Compliance Period	DMR/Report Due Date
By 4-30-2004	By 5-10-2004

Compliance Period	DMR/Report Due Date
By 4-30-2005	By 5-10-2005
By 4-30-2006	By 5-10-2006
By 4-30-2007	By 5-10-2006
By 4-30-2008	By 5-10-2008

- 2. The permittee shall notify the Department as soon as they know or have reason to believe:
  - a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in this permit if that discharge will exceed the highest of the following notification levels:
    - (1) One hundred micrograms per liter (100 Φg/L);
    - (2) Two hundred micrograms per liter (200  $\Phi$ g/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500  $\Phi$ g/L) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony.
    - (3) Five (5) times the maximum concentration value reported for that pollutant in the permit application; or
    - (4) The level established by the Board
  - b. That any activity has occurred or will occur which would result in the discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in this permit if that discharge will exceed the highest of the following notification levels:
    - (1) Five hundred micrograms per liter (500 Φg/L);
    - (2) One milligram per liter (1 mg/L) for antimony;
    - (3) Ten (10) times the maximum concentration value reported for that pollutant in the permit application; or
    - (4) The level established by the Board.
- 3. Hanover County shall not permit Bear Island to discharge wastewater through its outfall pursuant to Part I, Paragraphs A.1., A.3., and A.4. of this permit unless Hanover County and Bear Island continue to have in effect a binding contract, approved by the DEQ staff, providing for the enforcement by Hanover County against Bear Island of all requirements contained in the permit for its duration, and any reissuance thereof, including any testing or monitoring requirements made necessary by this permit, and including termination of all or part of the Bear Island discharge at any time Hanover County determines that the Bear Island discharge is causing or threatening to cause any violation of the permit.
- 4. The stream flow of the North Anna River at the Route 30 gaging station and at the gaging station to be constructed in the vicinity immediately upstream of Outfall 001 shall be determined in accordance with the following schedule until the wastewater treatment facility at Bear Island is expanded to a design average flow of 5.75 MGD:

Stream Flow Range	Number of Measurements
Above 300 cfs	1 per day
130 to 300 cfs	1 per twelve hours
Below 130 cfs	1 per four hours

When more than one measurement is made per day, the value for that day shall be the mean daily flow.

Determination of the river flow at the Route 30 gage is not required after the gage to be constructed in the vicinity of Outfall 001 is placed into service. The above frequency of measurement is not required at the gage to be constructed in the vicinity of Outfall 001 if the outfall gage is continuously measured.

5. The permittee shall monitor dissolved oxygen and temperature no less frequently than once per week at stations A through J as shown on the attached map. These stations are located on the North Anna River and Pamunkey River between the Route 30 bridge and the Route 301 bridge. The values obtained shall be recorded on Attachment B, which shall be submitted monthly with Attachment A.

The monitoring run shall not be required if ice conditions on the river prevent making the run or if the flow of the river is equal to or greater than 750 cfs at the Route 30 gage or the outfall gage when constructed.

Additionally, until the Bear Island wastewater treatment facility is expanded to a design average flow of 5.75 MGD, the monitoring run shall not be required when the river temperature is less than or equal to  $10^{\circ}$ C and the ratio of effluent BOD<sub>5</sub> (pounds per day) divided by the sum of river flow (daily mean flow in cfs at the Route 30 bridge or at the outfall gage when constructed) and  $Q_{PLAN}$  is less than or equal to 2.0. After the Bear Island expansion, this waiver shall no longer be applicable unless the permittee demonstrates to the DEQ staff that this waiver is still valid.

This monitoring program may be revised by approval of the Regional Director of the Piedmont Regional Office, DEQ. Such action must be initiated by request from the permittee to include documentation that the program will continue to provide adequate data with which to evaluate stream impacts if the requested revisions are approved.

6. The permittee may submit a testing program for staff review and approval to determine if ammonia limitations can be substituted for the TKN limitations contained in this permit. If such substitution is approved, and the permit modified if necessary, the ammonia limitations shall become an enforceable part of this permit.

### 7. Pretreatment

- a. Within 180 days of the effective or modification date of this permit, the permittee shall submit to the DEQ Regional Office a survey of all Industrial Users discharging to the POTW. The information shall be submitted on the DEQ Discharger Survey Form, or an equivalent form that includes the quantity and quality of the wastewater. Survey results shall include the identification of significant industrial users of the POTW.
- b. If Categorical Industrial User(s) are identified, or if the permittee or DEQ determines that the industrial user(s) have potential to adversely affect the operation of the POTW or cause violation(s) of federal, state or local standards or requirements, the permittee shall develop and submit to the DEQ Regional Office, within one year of written notification by DEQ, a pretreatment program for approval. The program shall enable the permittee to control by permit the Significant Industrial Users\* discharging wastewater to the treatment works.
- c. Should evaluation by the DEQ of results of the Industrial User survey conducted in accordance with (a) above indicate that the permittee is not required to implement a pretreatment program, the requirements for program development described in (d) below may be suspended by the DEQ.
- d. The approvable pretreatment program submission shall at a minimum contain the following parts:
  - (1) Legal authority,
  - (2) Program procedures,
  - (3) Funding and resources,
  - (4) Local limits evaluation, and local limits if needed,
  - (5) Enforcement response plan, and
  - (6) List of Significant Industrial Users.
- e. Where the permittee is required to develop a pretreatment program, they shall submit to the DEQ Regional Office an annual report that describes the permittee's program activities over the previous year. The annual report shall be submitted no later than January 31 of each year and shall include:
  - (1) An updated list of the Significant Industrial Users\* showing the categorical standards and local limits applicable to each.
  - (2) A summary of the compliance status of each Significant Industrial User with pretreatment standards and permit requirements.
  - (3) A summary of the number and types of Significant Industrial User sampling and inspections performed by the POTW.
  - (4) All information concerning any interference, upset, VPDES permit or Water Quality Standards violations directly attributable to Significant Industrial Users and enforcement actions taken to alleviate said events.
  - (5) A description of all enforcement actions taken against Significant Industrial Users over the previous 12 months.
  - (6) A summary of any changes to the submitted pretreatment program that have not been previously

reported to the DEQ Regional Office.

- (7) A summary of the permits issued to Significant Industrial Users since the last annual report.
- (8) POTW and self-monitoring results for Significant Industrial Users determined to be in significant noncompliance during the reporting period.
- (9) Results of the POTW's influent/effluent/sludge sampling, not previously submitted to DEQ.
- (10) Copies of newspaper publications of all Significant Industrial Users in significant non-compliance during the reporting period. This is due no later than March 31 of each year.
- (11) Signature of an authorized representative.
- f. The DEQ may require the POTW to institute changes to the legal authority regarding Significant Industrial User permit(s):
  - (1) If the legal authority does not meet the requirements of the Clean Water Act, Water Control Law or State regulations;
  - (2) If problems such as interferences, pass-through, violations of water quality standards or sludge contamination develop or continue; and
  - (3) If federal, state or local requirements change.

### \*A Significant Industrial User is one that:

- 1. Has a process wastewater\*\* flow of 25,000 gallons or more per average workday;
- Contributes a process wastestream which makes up 5-percent or more of the average dry weather hydraulic or organic capacity of the POTW;
- 3. Is subject to the categorical pretreatment standards; or
- 4. Has significant impact, either singularly or in combination with other Significant Dischargers, on the treatment works or the quality of its effluent.

- 8. The permit may be modified, or alternatively revoked and reissued, to address any change in design discharge volume.
- The permit may be modified, or alternatively revoked and reissued, to address any dissolved oxygen problem attributable to the Doswell Wastewater Treatment Facility discharge that is identified by the dissolved oxygen monitoring in the receiving streams.
- 10. Within 120 days of completion of the expanded wastewater treatment facilities at Bear Island, the permittee shall submit a study proposal for approval by the DEQ staff to characterize the degradability of the TKN in the discharge. (A procedure for determining the degradability of the TKN was approved by the staff of the State Water Control Board by letter dated May 29, 1987.)

The permit may be modified, or alternatively revoked and reissued, to address any deviation between the results of this testing and data previously presented on TKN degradability.

11. Once per year following any major changes in the BIPCo mill, a quantitative macroinvertebrate survey (using artificial substrates) shall be conducted on the North Anna and Pamunkey Rivers during September or October. The purpose of these surveys shall be to evaluate the impact of the Doswell discharge on aquatic populations in the receiving streams and to specifically determine any impacts from the oxygenation of the wastewater. The survey shall include a minimum of six sampling stations: One control station upstream of the discharge, two stations between the discharge and the oxygen sag point, one station in the vicinity of the sag point, and two stations downstream of the oxygen sag point. Sampling locations and survey methods, to include data analysis, shall be approved by the staff of the Department of Environmental Quality prior to initiation of the study.

### 12. Dioxin and Dibenzofuran

- a. The Department of Environmental Quality may modify, or alternatively revoke and reissue, this permit to incorporate measures for the control of dioxin and dibenzofuran if deemed necessary.
- b. The Department of Environmental Quality reserves the right to require a monitoring program for dioxin and/or dibenzofuran. The permittee shall submit an approvable monitoring program within 60 days after

<sup>\*\*</sup>Excludes sanitary, non-contact cooling water and boiler blowdown.

being notified of the need for such a program for review and approval by the staff.

- c. The permittee shall notify the Department of Environmental Quality of any process change, prior to implementation, by Bear Island that would result in the use of more than 10% chlorine bleached Kraft pulp in their process.
- 13. Plans and specifications for the filter to treat the Doswell Wastewater Treatment Plant effluent prior to use by Bear Island shall be submitted to the Virginia Department of Health and the Department of Environmental Quality for review and approval at least 120 days prior to beginning construction of the filter. Construction shall not begin until the plans and specifications have been approved.
- 14. Plans and specifications for the 60 million gallon effluent holding pond shall be submitted to the Department of Environmental Quality for review and approval at least 120 days prior to beginning construction. Construction shall not begin until the plans and specifications have been approved.
- 15. Within six months after initiation of wastewater discharge from the expanded Bear Island mill, the permittee shall complete and submit items V and VI of EPA Application Form 2C for Outfall 001. Based on that information, this permit may be modified, or alternatively revoked and reissued, in order to incorporate additional or different permit conditions.
- 16. The permittee and Bear Island shall each employ or contract at least one Class II licensed wastewater works operator for their respective treatment facility. The license shall be issued in accordance with Title 54.1 of the Code of Virginia and the regulations of the Board for Waterworks and Wastewater Works Operators. The permittee shall notify the Department in writing whenever he is not complying, or has grounds for anticipating he will not comply, with this requirement. The notification shall include a statement of reasons and a prompt schedule for achieving compliance. Following expansion, Bear Island shall employ or contract at least one Class I licensed wastewater works operator.
- 17. A written notice and plan of action for ensuring continued compliance with the terms of this permit shall be submitted to the Piedmont Regional Office when the monthly average influent flow to the Doswell Wastewater Treatment Plant reaches 95 percent of the design capacity authorized in this permit for each month of any three consecutive month period. The written notice shall be submitted within 30 days and the plan of action shall be received at the Piedmont Regional Office no later than 90 days from the third consecutive month for which the flow reached 95 percent of the design capacity. The plan shall include the necessary steps and a prompt schedule of implementation for controlling any current or reasonably anticipated problem resulting from high influent flows. Failure to submit an adequate plan in a timely manner shall be deemed a violation of this permit.
- 18. The Doswell Wastewater Treatment Plant shall meet Reliability Class I.
- 19. The permittee shall, in accordance with the Sewerage Regulations, obtain a Certificate to Construct (CTC), and a Certificate to Operate (CTO) from the Department of Environmental Quality prior to constructing wastewater treatment works and operating the treatment works, respectively. The permittee shall within 90 days of the effective date of this permit either submit for approval Operations and Maintenance (O&M) Manuals for the Doswell and Bear Island treatment facilities, or submit a statement confirming the accuracy and completeness of the current O&M Manuals. The permittee shall maintain accurate, approved O&M Manuals. Future changes to the treatment works must be addressed by the submittal of a revised O&M Manual within 90 days of the changes. Non-compliance with the CTC, CTO, or O&M Manual shall be deemed a violation of the permit.
- 20. The permittee shall conduct all sewage sludge use or disposal activities in accordance with the Sludge Management Plan (SMP), represented by the "VPDES Sewage Sludge Permit Application Form", approved with the issuance of this permit. Any proposed changes in the sewage sludge use or disposal practices or procedures followed by the permittee shall be documented and submitted for DEQ and Department of Health approval 90 days prior to the effective date of the changes. Upon approval, the revised SMP becomes an enforceable part of the permit. The permit may be modified, or alternatively revoked and reissued, to incorporate limitations or conditions necessitated by substantive changes in sewage sludge use of disposal practices.
- 21. The Board may promptly modify, or revoke and reissue, this permit if any applicable standard for sewage sludge use or disposal promulgated under Section 405(d) of the Clean Water Act is more stringent than any requirements for sludge use or disposal in this permit, or controls a pollutant or practice not limited in this permit.

### 22. Compliance Reporting under Part I.A.

a. Quantification levels shall be as follows:

Effluent Characteristic	Quantification Level
BOD <sub>5</sub>	5.0 mg/L
CBOD <sub>5</sub>	5.0 mg/L
TSS	1.0 mg/L
Ammonia-N	0.2 mg/L
TKN	0.5 mg/L
Total Phosphorus	0.02 mg/L

- b. **Monthly Average**: Compliance with the monthly average limitations and/or reporting requirements for parameters listed in Part I.A. shall be determined as follows: All concentration data below the stated QL shall be treated as zero. All concentration data equal to or above the QL shall be treated as reported. An arithmetic average shall be calculated using all reported data including the defined zeros, for the month. This arithmetic average shall be reported on the Discharge Monitoring Report (DMR) as calculated. If all data are below the QL, then the average shall be reported as "<QL". If reporting for quantity is required on the DMR and the calculated concentration is <QL then report "<QL" for the quantity, otherwise use the calculated concentration.
- c. Weekly Average: Compliance with the weekly average limitations and/or reporting requirements for parameters listed in Part I.A. shall be determined as follows: All concentration data below the stated QL shall be treated as zero. All concentration data equal to or above the QL shall be treated as reported. An arithmetic average shall be calculated using all reported data including the defined zeros, collected within each complete calendar week. The maximum value of the weekly averages thus determined shall be reported on the DMR. If all data are below the QL, then the average shall be reported as "<QL". If reporting for quantity is required on the DMR and the calculated concentration is <QL then report "<QL" for the quantity, otherwise use the calculated concentration.
- d. Daily Maximum: Compliance with the daily maximum limitations and/or reporting requirements for parameters listed in Part I.A. shall be determined as follows: All concentration data below the stated QL shall be treated as zero. All data equal to or above the QL shall be treated as reported. An arithmetic average of the values shall be calculated using all reported data, including the defined zeros, collected for each day during the reporting month. The maximum value of these daily averages thus determined shall be reported on the DMR as the Daily Maximum. If all data are below the QL, then the average shall be reported as "<QL". If reporting quantity is required on the DMR and the calculated concentration is <QL then report then report "<QL" for the quantity, otherwise use the calculated concentration.</p>
- e. Any single datum required shall be reported as "<QL" if it is less than the stated QL. Otherwise the numerical value shall be reported.
- 23. The permittee shall provide adequate notice to the Department of the following:
  - Any new introduction of pollutants into the treatment works from an indirect discharger which would be subject to Section 301 or 306 of the Clean Water Act and the State Water Control Law if it were directly discharging those pollutants; and
  - b. Any substantial change in the volume or character of pollutants being introduced into the treatment works by a source introducing pollutants into the treatment works at the time of issuance of this permit.

Adequate notice shall include information on (i) the quality and quantity of effluent introduced into the treatment works, and (ii) any anticipated impact of the change on the quantity or quality of effluent to be discharged from the treatment works.

- 24. The permit may be modified, or alternatively revoked and reissued, to revise the WET endpoints upon submittal of additional information and appropriate application.
- 25. Should the facilities permitted herein be issued a Warning Letter, a Notice of Violation, or be the subject of an enforcement action, the following effluent monitoring frequencies shall become effective upon the issuance of the letter or notice or initiation of the enforcement action and remain in effect until the permit's expiration date:

### Total Suspended Solids:

Outfall 001 One per day
Outfall 101 5 days per week
Outfall 201 5 days per week

### Total Kjeldahl Nitrogen:

Outfall 001 One per day
Outfall 101 One per week
Outfall 201 One per week

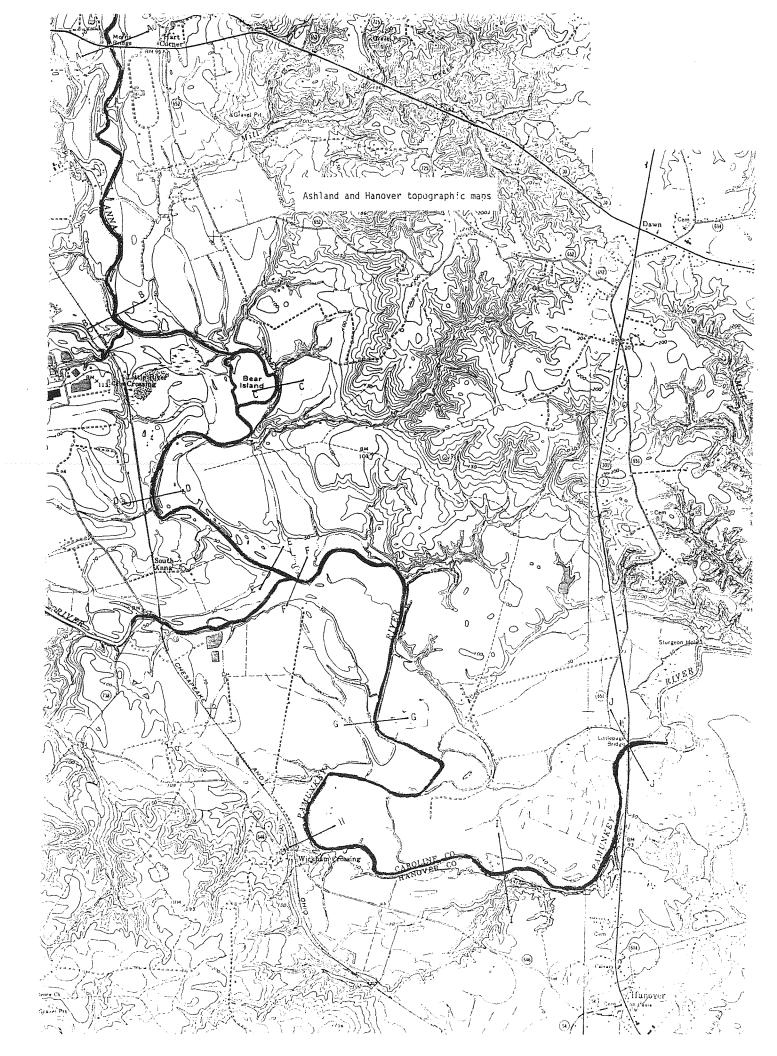
No other effluent limitations or monitoring requirements are affected by this special condition.

### D. Schedules of Compliance

1. The permittee shall construct a river gaging station in the vicinity immediately upstream of Outfall 001 in accordance with the following schedule:

Milestone		Compliance Date
1.	Submit plans for construction of gage.	Within 6 months following the effective date of the permit
2.	Begin construction	Within 6 months after DEQ approval of plans
3.	Submit reports of progress	Quarterly starting 3 months after DEQ approval of plans and continuing until compliance is achieved
4.	Complete construction and rating curve	Within 36 months after DEQ approval of plans

No later than 14 calendar days following a deadline established by the above schedule of compliance, the permittee shall submit to the Piedmont Regional Office either a report of progress or, in the case of specific actions being required, a written notice of compliance or noncompliance. In the latter case, the notice shall include the cause of noncompliance, any remedial action taken, and the probability of meeting the next scheduled requirement.



### CONDITIONS APPLICABLE TO ALL VPDES PERMITS

### A. Monitoring

- 1. Samples and measurements taken as required by this permit shall be representative of the monitored activity.
- 2. Monitoring shall be conducted according to procedures approved under Title 40 Code of Federal Regulations Part 136 or alternative methods approved by the U.S. Environmental Protection Agency, unless other procedures have been specified in this permit.
- 3. The permittee shall periodically calibrate and perform maintenance procedures on all monitoring and analytical instrumentation at intervals that will insure accuracy of measurements.

### B. Records

- 1. Records of monitoring information shall include:
  - a. The date, exact place, and time of sampling or measurements;
  - b. The individual(s) who performed the sampling or measurements:
  - c. The date(s) and time(s) analyses were performed;
  - d. The individual(s) who performed the analyses;
  - e. The analytical techniques or methods used; and
  - f. The results of such analyses.
- 2. Except for records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years, the permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report, or application. This period of retention shall be extended automatically during the course of any unresolved litigation regarding the regulated activity or regarding control standards applicable to the permittee, or as requested by the Board.

### C. Reporting Monitoring Results

1. The permittee shall submit the results of the monitoring required by this permit not later than the 10th day of the month after monitoring takes place, unless another reporting schedule is specified elsewhere in this permit. Monitoring results shall be submitted to:

Piedmont Regional Office 4949-A Cox Road Glen Allen, Virginia 23060-6296

2. Monitoring results shall be reported on a Discharge Monitoring Report (DMR) or on forms provided, approved, or specified by the Department.

### C. Reporting Monitoring Results (continued)

- 3. If the permittee monitors any pollutant specifically addressed by this permit more frequently than required by this permit using test procedures approved under Title 40 of the Code of Federal Regulations Part 136 or using other test procedures approved by the U.S. Environmental Protection Agency or using procedures specified in this permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or reporting form specified by the Department.
- 4. Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in this permit.

### D. <u>Duty to Provide Information</u>

The permittee shall furnish to the Department, within a reasonable time, any information which the Board may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The Board may require the permittee to furnish, upon request, such plans, specifications, and other pertinent information as may be necessary to determine the effect of the wastes from his discharge on the quality of state waters, or such other information as may be necessary to accomplish the purposes of the State Water Control Law. The permittee shall also furnish to the Department upon request, copies of records required to be kept by this permit.

### E. Compliance Schedule Reports

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.

### F. <u>Unauthorized Discharges</u>

Except in compliance with this permit, or another permit issued by the Board, it shall be unlawful for any person to:

- 1. Discharge into state waters sewage, industrial wastes, other wastes, or any noxious or deleterious substances; or
- 2. Otherwise alter the physical, chemical, or biological properties of such state waters and make them detrimental to the public health, or to animal or aquatic life, or to the use of such waters for domestic or industrial consumption, or for recreation, or for other uses.

### G. Reports of Unauthorized Discharges

Any permittee who discharges or causes or allows a discharge of sewage, industrial waste, other wastes or any noxious or deleterious substance into or upon state waters in violation of Part II F; or who discharges or causes or allows a discharge that may reasonably be expected to enter state waters in violation of Part II.F, shall notify the Department of the discharge immediately upon discovery of the discharge, but in no case later than 24 hours after said discovery. A written report of the unauthorized discharge shall be submitted to the Department within five days of discovery of the discharge. The written report shall contain:

### G. Reports of Unauthorized Discharges (continued)

- 1. A description of the nature and location of the discharge;
- 2. The cause of the discharge;
- 3. The date on which the discharge occurred;
- 4. The length of time that the discharge continued;
- 5. The volume of the discharge;
- 6. If the discharge is continuing, how long it is expected to continue;
- 7. If the discharge is continuing, what the expected total volume of the discharge will be; and
- 8. Any steps planned or taken to reduce, eliminate, and prevent a recurrence of the present discharge or any future discharges not authorized by this permit.

Discharges reportable to the Department under the immediate reporting requirements of other regulations are exempted from this requirement.

### H. Reports of Unusual or Extraordinary Discharges

If any unusual or extraordinary discharge including a bypass or upset should occur from a treatment works and the discharge enters or could be expected to enter state waters, the permittee shall promptly notify, in no case later than 24 hours, the Department by telephone after the discovery of the discharge. This notification shall provide all available details of the incident, including any adverse affects on aquatic life and the known number of fish killed.

The permittee shall reduce the report to writing and shall submit it to the Department within five days of discovery of the discharge in accordance with Part II.I.2. Unusual and extraordinary discharges include but are not limited to any discharge resulting from:

- 1. Unusual spillage of materials resulting directly or indirectly from processing operations;
- 2. Breakdown of processing or accessory equipment;
- 3. Failure or taking out of service some or all of the treatment works; and
- 4. Flooding or other acts of nature.

### I. Reports of Noncompliance

The permittee shall report any noncompliance which may adversely affect state waters or may endanger public health.

- 1. An oral report shall be provided within 24 hours from the time the permittee becomes aware of the circumstances. The following shall be included as information which shall be reported within 24 hours under this paragraph:
  - a. Any unanticipated bypass; and
  - b. Any upset which causes a discharge to surface waters.
- 2. A written report shall be submitted within 5 days and shall contain:
  - a. A description of the noncompliance and its cause;
  - b. The period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and
  - c. Steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.

The Board may waive the written report on a case-by-case basis for reports of noncompliance under Part II.I if the oral report has been received within 24 hours and no adverse impact on state waters has been reported.

### I. Reports of Noncompliance (continued)

3. The permittee shall report all instances of noncompliance not reported under Parts II.I.1 or 2, in writing, at the time the next monitoring reports are submitted. The reports shall contain the information listed in Part II.I.2.

NOTE: The immediate (within 24 hours) reports required in Parts II.G, H, and I may be made to the Department's Regional Office at (804) 527-5020 (voice) or (804) 527-5106 (facsimile). For reports outside normal working hours, leave a message and this shall fulfill the immediate reporting requirement. For emergencies, the Virginia Department of Emergency Services maintains a 24 hour telephone service at 1-800-468-8892.

### J. Notice of Planned Changes

- 1. The permittee shall give notice to the Department as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:
  - a. The permittee plans alteration or addition to any building, structure, facility, or installation from which there is or may be a discharge of pollutants, the construction of which commenced:
    - (1) After promulgation of standards of performance under Section 306 of the Clean Water Act which are applicable to such source; or
    - (2) After proposal of standards of performance in accordance with Section 306 of the Clean Water Act which are applicable to such source, but only if the standards are promulgated in accordance with Section 306 within 120 days of their proposal;
  - b. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations nor to notification requirements specified elsewhere in this permit; or
  - c. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.
- 2. The permittee shall give advance notice to the Department of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

### K. Signatory Requirements

- 1. Applications. All permit applications shall be signed as follows:
  - a. For a corporation: By a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (i) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the

### K. Signatory Requirements (continued)

necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;

- b. For a partnership or sole proprietorship: By a general partner or the proprietor, respectively; or
- c. For a municipality, state, federal, or other public agency: By either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a public agency includes: (i) The chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.
- 2. Reports, etc. All reports required by permits and other information requested by the Board shall be signed by a person described in Part II.K.1, or by a duly authorized representative of that person. A person is a duly authorized representative only if:
  - a. The authorization is made in writing by a person described in Part II.K.1;
  - b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.); and
  - c. The written authorization is submitted to the Department.
- 3. Changes to authorization. If an authorization under Part II.K.2 is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Part II.K.2 shall be submitted to the Department prior to or together with any reports, or information to be signed by an authorized representative.
- 4. Certification. Any person signing a document under Parts II.K.1 or 2 shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

### L. Duty to Comply

The permittee shall comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the State Water Control Law and the Clean Water Act, except that noncompliance with certain provisions of this permit may constitute a violation of the State Water Control Law but not the Clean Water Act. Permit noncompliance is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

### L. Duty to Comply (continued)

The permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal established under Section 405(d) of the Clean Water Act within the time provided in the regulations that establish these standards or prohibitions or standards for sewage sludge use or disposal, even if this permit has not yet been modified to incorporate the requirement.

### M. Duty to Reapply

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee shall apply for and obtain a new permit. All permittees with a currently effective permit shall submit a new application at least 180 days before the expiration date of the existing permit, unless permission for a later date has been granted by the Board. The Board shall not grant permission for applications to be submitted later than the expiration date of the existing permit.

### N. Effect of a Permit

This permit does not convey any property rights in either real or personal property or any exclusive privileges, nor does it authorize any injury to private property or invasion of personal rights, or any infringement of federal, state or local law or regulations.

### O. State Law

Nothing in this permit shall be construed to preclude the institution of any legal action under, or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any other state law or regulation or under authority preserved by Section 510 of the Clean Water Act. Except as provided in permit conditions on "bypassing" (Part II.U), and "upset" (Part II.V) nothing in this permit shall be construed to relieve the permittee from civil and criminal penalties for noncompliance.

### P. Oil and Hazardous Substance Liability

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Sections 62.1-44.34:14 through 62.1-44.34:23 of the State Water Control Law.

### Q. Proper Operation and Maintenance

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes effective plant performance, adequate funding, adequate staffing, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by the permittee only when the operation is necessary to achieve compliance with the conditions of this permit.

### R. Disposal of Solids or Sludges

Solids, sludges, or other pollutants removed in the course of treatment or management of pollutants shall be disposed of in a manner so as to prevent any pollutant from such materials from entering state waters.

### S. Duty to Mitigate

The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

### T. Need to Halt or Reduce Activity not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

### U. Bypass

"Bypass" means the intentional diversion of waste streams from any portion of a treatment facility.
The permittee may allow any bypass to occur which does not cause effluent limitations to be
exceeded, but only if it also is for essential maintenance to assure efficient operation. These
bypasses are not subject to the provisions of Parts II.U.2 and U.3.

### 2. Notice

- a. Anticipated bypass. If the permittee knows in advance of the need for a bypass, prior notice shall be submitted, if possible at least ten days before the date of the bypass.
- b. Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in Part II.I.

### 3. Prohibition of bypass

- a. Bypass is prohibited, and the Board may take enforcement action against a permittee for bypass, unless:
  - (1) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
  - (2) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
  - (3) The permittee submitted notices as required under Part II.U.2.
- b. The Board may approve an anticipated bypass, after considering its adverse effects, if the Board determines that it will meet the three conditions listed above in Part II.U.3.a.

### V. Upset

- 1. An upset constitutes an affirmative defense to an action brought for noncompliance with technology based permit effluent limitations if the requirements of Part II.V.2 are met. A determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is not a final administrative action subject to judicial review.
- 2. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
  - a. An upset occurred and that the permittee can identify the cause(s) of the upset;
  - b. The permitted facility was at the time being properly operated;
  - c. The permittee submitted notice of the upset as required in Part II.I; and
  - d. The permittee complied with any remedial measures required under Part II.S.
- 3. In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

### W. Inspection and Entry

The permittee shall allow the Director, or an authorized representative, upon presentation of credentials and other documents as may be required by law, to:

- 1. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
- 2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- 3. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
- 4. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act and the State Water Control Law, any substances or parameters at any location.

For purposes of this section, the time for inspection shall be deemed reasonable during regular business hours, and whenever the facility is discharging. Nothing contained herein shall make an inspection unreasonable during an emergency.

### X. Permit Actions

Permits may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

Permit No. VA0029521 Part II Page 9 of 9

### Y. Transfer of permits

- Permits are not transferable to any person except after notice to the Department. Except as
  provided in Part II.Y.2, a permit may be transferred by the permittee to a new owner or operator only
  if the permit has been modified or revoked and reissued, or a minor modification made, to identify
  the new permittee and incorporate such other requirements as may be necessary under the State
  Water Control Law and the Clean Water Act.
- 2. As an alternative to transfers under Part II.Y.1, this permit may be automatically transferred to a new permittee if:
  - a. The current permittee notifies the Department at least 30 days in advance of the proposed transfer of the title to the facility or property;
  - b. The notice includes a written agreement between the existing and new permittees containing a specific date for transfer of permit responsibility, coverage, and liability between them; and
  - c. The Board does not notify the existing permittee and the proposed new permittee of its intent to modify or revoke and reissue the permit. If this notice is not received, the transfer is effective on the date specified in the agreement mentioned in Part II.Y.2.b.

### Z. Severability

The provisions of this permit are severable, and if any provision of this permit or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.